

## **IN THE CLAIMS:**

1-4. (Canceled)

5. (Currently Amended): A tape drive apparatus comprising:

a tape head, wherein the tape head accesses data on a magnetic tape placed within the tape apparatus, wherein the magnetic tape is moveable between a first reel and a second reel;

a first motor, wherein the first motor rotates the first reel;

a first tachometer, wherein the first tachometer generates first data with respect to rotation of the first reel;

a second motor, wherein the second motor rotates the second reel;

a second tachometer, wherein the second tachometer generates second data with respect to rotation of the second reel; and

a controller, wherein the controller is connected to the first tachometer, the second tachometer, the first motor, and the second motor, and wherein the controller controls movement of the magnetic tape from the first reel to the second reel by using the ~~[[first]]~~ second data ~~if the tape is being moved in a direction from the first reel to the second reel~~ when in a beginning of tape condition and wherein the controller switches to controlling movement of the magnetic tape from the first reel to the second reel by using the second first data ~~if the tape is being moved in a direction from the second reel to the first reel~~ responsive to transitioning from the beginning of tape condition to an end of tape condition.

6. (Original): The tape drive apparatus of claim 5, wherein the controller is a processor.

7. (Original): The tape drive apparatus of claim 5, wherein the controller is a digital signal processor.

8. (Original): The tape drive apparatus of claim 5, wherein first reel is a file reel and the second reel is machine reel.

9. (Original): The tape drive apparatus of claim 5, wherein the first tachometer is a first encoder and the second tachometer is a second encoder.

10. (Original): The tape drive apparatus of claim 5, wherein the first motor is connected to the controller through a first amplifier and the second motor is connected to the controller by a second amplifier.

11. (Original): The tape drive apparatus of claim 5, wherein the tape head is a read/write head.

12. (Original): The tape drive apparatus of claim 5, wherein the controller controls position of the tape by sending signals to the first motor when the first data is used.

13. (Original): The tape drive apparatus of claim 5, wherein the controller controls position of the tape by sending signals to the second motor when the second data is used.

14-22. (Canceled)

23. (Original): A tape drive system for controlling tape movement, the tape drive system comprising:

determining means for determining a radius of a file reel and a radius of a machine reel;

first moving means for moving the tape using machine reel control if the radius of the machine reel is less than the radius of the file reel; and

second moving means for moving the tape using file reel control if the radius of the file reel is less than or equal to the radius of the machine reel.

24-27. (Canceled)

28. (Original): A computer program product in a computer readable medium for controlling tape movement in a tape drive system, the computer program product comprising:

first instructions for determining a radius of file reel and a radius of machine reel;

second instructions for moving the tape using machine reel control if the radius of the machine reel is less than the radius of the file reel; and

third instructions for moving the tape using file reel control if the radius of the file reel is less than or equal to the radius of the machine reel.

29. (Canceled)

30. (New): The tape drive apparatus of claim 5, wherein the tape drive apparatus is in the beginning of tape condition when a radius of the first reel is greater than a radius of the second reel.

31. (New): The tape drive apparatus of claim 5, wherein the tape drive apparatus is in the end of tape condition when a radius of the first reel is less than a radius of the second reel.

32. (New): The tape drive apparatus of claim 5, wherein the tape drive apparatus transitions from the beginning of tape condition to the end of tape condition when the tape drive apparatus is in a center of tape condition.

33. (New): The tape drive apparatus of claim 32, wherein the tape drive apparatus is in the center of tape condition when a radius of the first reel is equal to a radius of the second reel.

34. (New): The tape drive system of claim 23, wherein a first tachometer is associated with the machine reel and a second tachometer is associated with the file reel.

35. (New): The tape drive system of claim 34, wherein the first moving means moves the tape using machine reel control by controlling movement of the tape using data received from the first tachometer.

36. (New): The tape drive system of claim 34, wherein the second moving means moves the tape using file reel control by controlling movement of the tape using data received from the second tachometer.

37. (New): The computer program product of claim 28, wherein a first tachometer is associated with the machine reel and a second tachometer is associated with the file reel.

38. (New): The computer program product of claim 37, wherein the second instructions include instructions for controlling movement of the tape using data received from the first tachometer.

39. (New): The computer program product of claim 37, wherein the third instructions include instructions for controlling movement of the tape using data received from the second tachometer.

40. (New): A method in a tape drive system for controlling tape movement, wherein the tape drive system includes a tape head that accesses data on a magnetic tape placed within the tape drive system, wherein the magnetic tape is moveable between a first reel and a second reel, wherein a first motor rotates the first reel, wherein a first tachometer generates first data with respect to rotation of the first reel, wherein a second motor rotates the second reel, wherein a second tachometer generates second data with respect to rotation of the second reel, the method comprising the tape drive system implemented steps of:

controlling movement of the magnetic tape from the first reel to the second reel by using the first data when in a beginning of tape condition; and

switching to controlling movement of the magnetic tape from the first reel to the second reel by using the second data when transitioning from the beginning of tape condition to an end of tape condition.

41. (New): The method of claim 40, wherein the tape drive system is in the beginning of tape condition when a radius of the first reel is less than a radius of the second reel.

42. (New): The method of claim 40, wherein the tape drive system is in the end of tape condition when a radius of the first reel is greater than a radius of the second reel.

43. (New): The method of claim 40, wherein the tape drive apparatus transitions from the beginning of tape condition to the end of tape condition when the tape drive apparatus is in a center of tape condition.

44. (New): The method of claim 43, wherein the tape drive apparatus is in the center of tape condition when a radius of the first reel is equal to a radius of the second reel.

45. (New): A method in a tape drive system for controlling movement of tape from a first reel in the tape drive system to a second reel in the tape drive system, the method comprising the tape drive system implemented steps of:

- determining a radius of the first reel;

- determining a radius of the second reel;

- controlling movement of the tape from the first reel to the second reel using data received from a first encoder associated with the first reel if the radius of the first reel is less than the radius of the second reel; and

- responsive to the radius of the first reel being equal to or greater than the radius of the second reel, controlling movement of the tape from the first reel of the second reel using data received from a second encoder associated with the second reel.

46. (New): The method of claim 45, wherein the first encoder is a tachometer.

47. (New): The method of claim 45, wherein the second encoder is a tachometer.